DCoMPASS™

Digital Compact Multi-purpose Advanced Stabilized System - Airborne

General

The DCoMPASS™ payload is the one of the newst members of Elop's CoMPASS™ battle-proven stabilized EO payload family, in service with leading customers worldwide.

- Delivers superb day and night intelligence, surveillance, target acquisition and tactical reconnaissance (ISTAR) capabilities in the harshest weather conditions
- Single LRU configuration integrating up to five EO elements: HD color TV camera with optional low light mode, large format thermal imager, laser target illuminator, Eyesafe Laser Range Finder and laser target designator
- Lightweight, small size payload made possible by new miniature digital electronics and advanced lightweight materials
- Battle proven, military qualified for airborne application

Applications

- Armed reconnaissance
- Combat SAR
- Law enforcement
- Maritime patrol

Elbit Systems
Electro-optics - Elop

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Main Advantages & Features

- Highly stabilized Crystal clear image on both HD color TV and thermal imager
- Compact and lightweight design permits additional payolad and fuel capacity in the carrying platform while facilitating future upgrades
- Inertial Measurement Unit (IMU) provides highly accurate geo-location and rock solid stabilization
- Unique in-flight boresight mechanism enables long range precise laser designation
- Simple system Integration with Helmet Mounted (HMS) systems, radar and fire control applications
- Advanced video enhancement package including: haze penetration, color restoration and sharpening features

Technical Data

System

- Diameter 15″
- Weight <33-38 Kg
- Angular coverage
  - Azimuth N x 360º
  - Elevation +35º to -85º
- Environmental conditions MIL-STD-810F

Day Channel (HD)

- Camera type Large format digital CCD color camera
- Sensor 2/3″ CCD
- No. of pixels 1394 x 1040
- FOV (continuous zoom)
  - Narrow 0.59° x 0.44°
  - Wide 21.25° x 16°

Thermal Imager

- FLIR Cooled 3rd generation 3-5 µm FPA with 640 x 512 pixels
- FOV

	FLIR A-TOPAZ	FLIR B-LOTUS
Wide	24° X 18°	13.7° X 10.4°
Medium	Continuous	2.0° x 1.5°
Narrow	0.8° X 0.6°	0.61° x 0.46°

Laser Sensors

- Laser Rangefinder (Eyesafe)
  - Wavelength 1.54 µm
  - Rate 1 pps
- Dual Wavelength Laser Target Designator & Rangefinder (LRFTD)
  - Transmitter Diode-pumped advanced technology
  - Wavelength 1.064 µm / 1.57 µm
  - Max pulse rate 20pps
- Laser target illuminator/pointer
  - Wavelength 830 nm (NVG compatible)

Interface Communications

- RS422
- MIL-STD-1553
- Ethernet

Video Output

- PAL, NTSC
- Gigabit Ethernet (GigE)

Additional features

- Geo-location using Inertial Measurements Unit (IMU)
- Auto-tracker
- Step & Stare
- Picture In Picture (PIP)

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